



State of Utah

Department of
Environmental Quality

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Executive Director

DIVISION OF AIR QUALITY
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DAQE-AN2934002-04

October 22, 2004

Randy Tomaiko
Quality Excavation, Inc. (Quality Rock Products)
113 East 200 North #2
St. George, Utah 84770

Dear Mr. Tomaiko:

Re: Approval Order: Relocation of Permanent Aggregate Processing Plant
Washington County - CDS B; ATT; NSPS, TITLE V Minor
Project Code: N2934-002

The attached document is the Approval Order (AO) for the above-referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Jon Black. He may be reached at (801) 536-4047.

Sincerely,

Richard W. Sprott, Executive Secretary
Utah Air Quality Board

RWS:JB:re

cc: Washington County Health Department

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

**APPROVAL ORDER: Relocation of Permanent Aggregate
Processing Plant**

**Prepared By: Jon Black, Engineer
(801) 536-4047
Email: jlblack@utah.gov**

APPROVAL ORDER NUMBER

DAQE-AN2934002-04

Date: October 22, 2004

**Quality Excavation, Inc.
Source Contact
Todd Call
(435) 634-0111**

**Richard W. Sprott
Executive Secretary
Utah Air Quality Board**

Abstract

Quality Excavation, Inc., submitted a Notice of Intent for relocating their permanent aggregate plant (DAQE-AN2934001-03) two miles south of the current location on 2045 East 4130 South, St. George, Utah. The new location will be at 1630 East 6000 South, St. George which is located in Washington County. Washington County is an attainment area of the National Ambient Air Quality Standards (NAAQS) for all pollutants. New Source Performance Standards (NSPS) 40 CFR 60 Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants) regulations will apply to this aggregate plant. National Emission Standards for Hazardous Air Pollutants (NESHAP) and Maximum Available Control Technology (MACT) regulations do not apply to this source. Title V of the 1990 Clean Air Act applies to this source. Best Available Control Technology will remain the same in that water suppression methods will be used to control fugitive dust (water sprays and water trucks). No emission changes will result from this permanent move. The potential to emit emission total will remain as follows, in tons per year: $PM_{10} = 4.97$, $NO_x = 39.33$, $SO_2 = 2.75$, $CO = 8.89$, and $VOC = 3.43$.

The above-referenced project has been evaluated and found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307), and the Utah Air Conservation Act. A public comment period was not required for this project. This air quality AO authorizes the project with the following conditions and failure to comply with any of the conditions may constitute a violation of this order.

General Conditions:

1. This Approval Order (AO) applies to the following company:

<u>Site Office</u>	<u>Corporate Office Location</u>
Quality Excavation 1630 East 6000 South St. George, Utah 84790	Quality Excavation 113 East 200 North #2 St. George, Utah 84770
Phone Number	(435) 674-0111
Fax Number	(435) 674-3711

The equipment listed in this AO shall be operated at the following location:

Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD27
4,104.3 kilometers. Northing, 275.3 kilometers. Easting, Zone12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401-1.

5. All records referenced in this AO or in applicable NSPS and/or NESHAP and/or MACT standards, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Records shall be kept for the following minimum periods:
 - A. Emission inventories Five years from the due date of each emission statement or until the next inventory is due, whichever is longer.
 - B. All other records Two years
6. Quality Excavation, Inc., shall operate and conduct its operations of the aggregate processing plant in accordance with the terms and conditions of this AO, which was written pursuant to Quality Excavation's Notice of Intent submitted to the Division of Air Quality (DAQ) on June 3, 2004 and additional information submitted to the DAQ on July 15, 2004.
7. This AO shall replace the AO (DAQE-AN2934001-03) dated November 17, 2003.
8. The approved installations shall consist of the following equipment or equivalent*:

Plant #1:

- A. One (1) Cedarapids Jaw Crusher, 22" x 36", SN #9690*
- B. One (1) Cedarapids Cone Crusher, RC36, SN #M1010*
- C. One (1) JCI Screen, 6203-32, SN #S031161*
- D. One (1) JCI Screen, 6203-32, SN #00H11D32*
- E. One (1) Extec 5000 Screen, SN #6748*
- F. One (1) Diesel Generator, 310 kW, SN #5KA01924*

Plant #2:

- G. One (1) Eagle/Austin Western Jaw Crusher, 32" x 40", SN #3240-302*
- H. One (1) METRSO Cone Crusher, SN #NW300RD*
- I. One (1) Fabtec Vibrating Grizzly, SN #46-16F89-98*
- J. One (1) Diesel Generator, 425 kW, SN #450THL507*
- K. Both plants will be equipped with miscellaneous conveyors, stackers, scales, loaders, dozers and aggregate moving equipment.

* Equivalency shall be determined by the Executive Secretary.

Note: Items 8.A. thru 8.E, 8.G and 8.H will be subject to 40 CFR 60 Subpart OOO if plant meets Subpart requirements.

Limitations and Tests Procedures

9. Visible emissions from the following emission points shall not exceed the following values:
 - A. All crushers - 15% opacity
 - B. All screens - 10% opacity

- C. All conveyor transfer points - 10% opacity
- D. All diesel engines - 20% opacity
- E. Conveyor drop points - 20% opacity
- F. All other points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

For sources that are subject to NSPS, opacity shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9.

10. Visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall not exceed 20% opacity. Visible emissions determinations for traffic sources shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Six points, distributed along the length of the haul road or in the operational area, shall be chosen by the Executive Secretary or the Executive Secretary's representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made 1/2 vehicle length or greater behind the vehicle and at approximately 1/2 the height of the vehicle or greater. The accumulated six readings shall be averaged for the compliance value.
11. The following production limit shall not be exceeded:
 - A. 300,000 tons of processed¹ aggregate material per rolling 12-month period
 - B. 2,300 hours of operation, per individual aggregate plant, per rolling 12-month period

To determine compliance with a rolling 12-month total the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of consumption/production shall be kept for all periods when the plant is in operation. Production shall be determined by scale house records or vendor receipts. The records of production shall be kept on a daily basis. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

Roads and Fugitive Dust

12. The facility shall abide by all applicable requirements of R307-205 for Fugitive Emission and Fugitive Dust sources. The full text of R307-205, Emission Standards: Fugitive Emissions and Fugitive Dust is included as Appendix A. However, to be in compliance, this facility must operate in accordance with the most current version of R307-205.

Fuels

13. The owner/operator shall use #1, #2 or a combination of #1 and #2 diesel fuel in the on-site equipment.

¹ Processed is defined as passing through a crushing or screening unit prior to product delivery.

Federal Limitations and Requirements

14. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18 (General Conditions) and Subpart OOO, 40 CFR 60.670 to 60.676 (Standards of Performance for Nonmetallic Mineral Processing Plants) apply to this installation.

Records & Miscellaneous

15. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded.
16. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.
17. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:

<http://www.airquality.utah.gov/>

The annual emissions estimations below include point source, fugitive emissions, fugitive dust, and road dust. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The controlled Potential To Emit (PTE) emissions for this source (the entire Desert Canyon plant) are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	PM ₁₀	4.97
B.	SO ₂	2.75
C.	NO _x	39.33

D.	CO.....	8.89
E.	VOC.....	3.43

Approved By:

Richard W. Sprott, Executive Secretary
Utah Air Quality Board

Appendix A

R307. Environmental Quality, Air Quality.

R307-205. Emission Standards: Fugitive Emissions and Fugitive Dust.

R307-205-1. Applicability.

- (1) Except where otherwise specified, R307-205 applies statewide.
- (2) The provisions of R307-205 shall not apply to any sources for which limitations for fugitive dust or fugitive emissions are assigned pursuant to R307-401, R307-305, or R307-307 nor shall they apply to agricultural or horticultural activities.
- (3) The following definitions apply throughout R307-205:
"Material" means sand, gravel, soil, minerals or other matter which may create fugitive dust.
"Road" means any public or private road.

R307-205-2. Fugitive Emissions.

Fugitive emissions from sources in areas outside Davis, Salt Lake and Utah Counties, Ogden City and any nonattainment area for PM10 and which were constructed before April 25, 1971, shall not exceed 40% opacity. Fugitive emissions from sources constructed after April 25, 1971, shall not exceed 20% opacity.

R307-205-3. Fugitive Dust.

- (1) Storage and Handling of Aggregate Materials. Any person owning, operating or maintaining a new or existing material storage, handling or hauling operation shall minimize fugitive dust from such an operation. Such control may include the use of enclosures, covers, stabilization or other equivalent methods or techniques as approved by the Executive Secretary.
- (2) Construction and Demolition Activities.
 - (a) Any person engaging in clearing or leveling of land greater than one-quarter acre in size, earthmoving, excavation, or movement of trucks or construction equipment over cleared land greater than one-quarter acre in size or access haul roads shall take steps to minimize fugitive dust from such activities. Such control may include watering and chemical stabilization of potential fugitive dust sources or other equivalent methods or techniques approved by the Executive Secretary.
 - (b) The owner or operator of any land area greater than one-quarter acre in size that has been cleared or excavated shall take measures to prevent fugitive particulate matter from becoming airborne. Such measures may include:
 - (i) planting vegetative cover,
 - (ii) providing synthetic cover,
 - (iii) watering,
 - (iv) chemical stabilization,
 - (v) wind breaks, or
 - (vi) other equivalent methods or techniques approved by the Executive Secretary.
 - (c) Any person engaging in demolition activities including razing homes, buildings, or other structures or removing paving material from roads or parking areas shall take steps to minimize fugitive dust from such activities. Such control may include watering and chemical stabilization or other equivalent methods or techniques approved by the Executive Secretary.

R307-205-4. Roads.

- (1) Any person planning to construct or operate a new unpaved road which is anticipated to have an average daily traffic volume of 150 vehicle trips per day or greater, averaged over a consecutive five day period, shall submit a notice of intent to construct or operate such a road to the Executive Secretary pursuant to R307-401. Such notice shall include proposed action to minimize fugitive dust emissions from the road.
- (2) The Executive Secretary may require persons owning, operating or maintaining any new or existing road, or having right-of-way easement or possessory right to use the same to supply traffic count information as determined necessary to ascertain whether or not control techniques are adequate or additional controls are necessary.
- (3) Any person who deposits materials which may create fugitive dust on a public or private paved road shall clean the road promptly.

R307-205-5. Mining Activities.

- (1) Fugitive dust, construction activities, and roadways associated with mining activities are regulated under the provisions of R307-205-5 and not by R307-205-3 and 4.
- (2) Any person who owns or operates a mining operation shall minimize fugitive dust as an integral part of site preparation, mining activities, and reclamation operations.
- (3) The fugitive dust control measures to be used may include:
 - (a) periodic watering of unpaved roads,
 - (b) chemical stabilization of unpaved roads,
 - (c) paving of roads,

- (d) prompt removal of coal, rock minerals, soil, and other dust-forming debris from roads and frequent scraping and compaction of unpaved roads to stabilize the road surface,
 - (e) restricting the speed of vehicles in and around the mining operation,
 - (f) revegetating, mulching, or otherwise stabilizing the surface of all areas adjoining roads that are a source of fugitive dust,
 - (g) restricting the travel of vehicles on other than established roads,
 - (h) enclosing, covering, watering, or otherwise treating loaded haul trucks and railroad cars, to minimize loss of material to wind and spillage,
 - (i) substitution of conveyor systems for haul trucks and covering of conveyor systems when conveyed loads are subject to wind erosion,
 - (j) minimizing the area of disturbed land,
 - (k) prompt revegetation of regraded lands,
 - (l) planting of special windbreak vegetation at critical points in the permit area,
 - (m) control of dust from drilling, using water sprays, hoods, dust collectors or other controls approved by the Executive Secretary.
 - (n) restricting the areas to be blasted at any one time,
 - (o) reducing the period of time between initially disturbing the soil and revegetating or other surface stabilization,
 - (p) restricting fugitive dust at spoil and coal transfer and loading points,
 - (q) control of dust from storage piles through use of enclosures, covers, or stabilization and other equivalent methods or techniques as approved by the Executive Secretary, or
 - (r) other techniques as determined necessary by the Executive Secretary.
- (4) Any person owning or operating an existing mining operation in an actual area of nonattainment for particulate or an existing mining operation outside an actual area of nonattainment from which fugitive dust impacts an actual area of nonattainment for particulate shall submit plans for control of fugitive dust from such operations to the Executive Secretary for approval no later than September 29, 1981, 180 days after the effective date of this regulation.

R307-205-6. Tailings Piles and Ponds.

- (1) Fugitive dust, construction activities, and roadways associated with tailings piles and ponds are regulated under the provisions of R307-205-6 and not by R307-205-3 and 4.
- (2) Any person owning or operating an existing tailings operation where fugitive dust results from grading, excavating, depositing, or natural erosion or other causes in association with such operation shall take steps to minimize fugitive dust from such activities. Such controls may include:
 - (a) watering,
 - (b) chemical stabilization,
 - (c) synthetic covers,
 - (d) vegetative covers,
 - (e) wind breaks,
 - (f) minimizing the area of disturbed tailings,
 - (g) restricting the speed of vehicles in and around the tailings operation, or
 - (h) other equivalent methods or techniques which may be approvable by the Executive Secretary.
- (3) Any person owning or operating an existing tailings operation in a nonattainment area for particulate or an existing mining operation outside an actual area of nonattainment from which fugitive dust impacts an actual area of nonattainment for particulate shall submit plans for control of fugitive dust from such operations to the Executive Secretary for approval no later than September 29, 1981, 180 days after the effective date of this regulation.